



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1108; Directorate Identifier 2011-NM-283-AD; Amendment 39-17700; AD 2013-25-04]

RIN 2120-AA64

Airworthiness Directives; Embraer S.A. Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Embraer S.A. Model ERJ 170 and ERJ 190 airplanes. This AD was prompted by reports of failures of the emergency slide on the forward passenger door, which prevented the door from opening. This AD requires repetitive re-packing of certain forward door escape slides. We are issuing this AD to prevent failure of the emergency slide, which can prevent the forward passenger door from opening, and which could result in impeded emergency evacuation and possible subsequent injury to passengers and flightcrew.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at

<http://www.regulations.gov/#!docketDetail;D=FAA-2012-1108>; or in person at the U.S.

Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

For Embraer service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email distrib@embraer.com.br; Internet <http://www.flyembraer.com>. For Goodrich service information identified in this AD, contact Goodrich Corporation, Aircraft Interior Products, ATTN: Technical Publications, 3414 South Fifth Street, Phoenix, Arizona 85040; telephone 602-243-2270; email george.yribarren@goodrich.com; Internet <http://www.goodrich.com/TechPubs>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

FOR FURTHER INFORMATION CONTACT: Cindy Ashforth, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-2768; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in

the Federal Register on October 25, 2012 (77 FR 65144). The NPRM proposed to correct an unsafe condition for the specified products. The Agência Nacional de Aviação Civil (ANAC), which is the aviation authority for Brazil, has issued Brazilian Airworthiness Directives 2011-12-01 and 2011-12-02, both effective December 27, 2011 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for the specified products. MCAI Brazilian Airworthiness Directive 2011-12-01 states:

During operational checks of escape slide P/N [part number] 4A4030-5, some operators have reported failure in the escape slide preventing the forward passenger door opening. This [Brazilian] AD is being issued to prevent failure of this system which could impede an emergency evacuation and increase the chance of injury to passengers and flight crew.

* * * * *

MCAI Brazilian Airworthiness Directive 2011-12-02 states:

During scheduled deployment tests of escape slide P/N 104003-2, some operators have reported failure in the escape slide preventing the forward passenger door opening. This [Brazilian] AD is being issued to prevent failure of this system which could impede an emergency evacuation and increase the chance of injury to passengers and flight crew.

* * * * *

The required action is repetitive re-packing of certain forward door escape slides. You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov/#!documentDetail;D=FAA-2012-1108-0002>.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Request to Reference Newer Revisions of Service Information

Embraer requested that paragraphs (h), (j)(1)(i), and (j)(1)(ii) of the NPRM (77 FR 65144, October 25, 2012) reference newer revisions of the maintenance review board reports. These new revisions are EMBRAER 170/175 Maintenance Review Board Report, MRB-1621, Revision 8, dated August 20, 2012; and EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 6, dated August 20, 2012.

We agree to revise paragraph (h) of this final rule to also reference the newer revisions. However, paragraphs (j)(1)(i) and (j)(1)(ii), along with paragraphs (j)(1)(iii), (j)(1)(iv), and (j)(2) of the NPRM (77 FR 65144, October 25, 2012), were removed from this final rule and are identified in the Incorporation by Reference section (paragraph (k) of this final rule).

Request to Add Alternative Maintenance Instructions for Model ERJ 190-100 ECJ Airplanes

Embraer requested that the NPRM (77 FR 65144, October 25, 2012) reference Task 25-65-01-001, Emergency Evacuation Slide Assembly, in EMBRAER Lineage 1000 Maintenance Planning Guide, MPG-2928, Revision 3, dated September 28, 2012 (for Model ERJ 190-100 ECJ airplanes), instead of Section 1, “System and Powerplant

Maintenance Requirements,” of EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010. Task 25-65-01-001 of the EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 6, dated August 20, 2012; and Task 25-65-01-001 of Section 1, “System and Powerplant Maintenance Requirements,” of EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010; are not applicable to the ERJ 190-100 ECJ model.

We agree. Since operators of Model ERJ 190-100 ECJ airplanes are not able to comply with the requirements of this final rule using EMBRAER 190/195 Maintenance Review Board Reports, we have added paragraph (h)(2) to this final rule to allow those operators to use the EMBRAER Lineage 1000 (ERJ 190-100 ECJ) Maintenance Planning Guide instead. This change does not expand the scope of the NPRM (77 FR 65144, October 25, 2012).

Request to Extend Repetitive Re-packing Interval

US Airways requested that the repetitive re-packing interval in its current slide maintenance program be left at 36 months instead changing it to the 18 months proposed in the NPRM (77 FR 65144, October 25, 2012). US Airways suggested a one-time re-pack interval of 18 months and a repetitive re-pack interval of 36 months; otherwise, the reduced interval would add extensive work-hours and cost to change to and maintain an 18-month repetitive re-pack interval.

We disagree with the requested change. To allow a 36-month repetitive re-pack interval instead of an 18-month re-pack interval would defeat/counteract the intent of this

AD. Over time, the slide can develop a “set” position, which prevents the slide from properly deploying in an emergency. Re-packing at the reduced interval of 18 months is intended to prevent the “set” and improves reliability of the slide in an emergency. We have not changed this final rule in this regard.

Request to Allow Credit for Previously Re-packed Slides

US Airways requested a time allowance for slides that have been previously re-packed using the Goodrich service information. US Airways stated that regardless if its slides have been re-packed, the 18-month requirement is enforced. US Airways requested that those slides that have been previously re-packed using the applicable Goodrich service information be exempt from the 18-month re-packing requirement and be allowed to enter the repetitive maintenance schedule at the 36-month overhaul interval.

We disagree. As explained in the comment response to “Request to Extend Repetitive Re-packing Interval,” the intent of this AD is to prevent “set” by re-packing the slide at 18-month intervals instead of only at the 36-month maintenance overhaul. Paragraphs (g) and (h) of this AD specify that re-packing must be done at least every 18 months, but accomplishing an overhaul instead is also acceptable since the overhaul process includes re-packing the slide. An operator could choose to re-pack the slide at 18 months, overhaul the slide at 36 months, re-pack at 54 months, overhaul at 72 months, and so on. However, operators should note that once the slide is 15 years old, the task specified in paragraph (h) of this final rule currently requires that the slides be overhauled at intervals not to exceed 12 months. We have not changed this final rule in this regard.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 65144, October 25, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 65144, October 25, 2012).

Costs of Compliance

We estimate that this AD affects 235 products of U.S. registry. We also estimate that it will take about 2 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost between \$435 and \$542 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of this AD to U.S. operators to be between \$153,065 and \$180,136, or \$605 and \$712 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in “Subtitle VII, Part A, Subpart III, Section 44701: General requirements.” Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
3. Will not affect intrastate aviation in Alaska; and
4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov/#!docketDetail;D=FAA-2012-1108>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2013-25-04 Embraer S.A.: Amendment 39-17700. Docket No. FAA-2012-1108;

Directorate Identifier 2011-NM-283-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to the airplanes identified in paragraphs (c)(1) and (c)(2) of this AD, certificated in any category.

(1) Embraer S.A. Model ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; and Model ERJ 170-200 LR, -200 SU, and -200 STD airplanes; equipped with Goodrich escape slides having part number (P/N) 4A4030-5.

(2) Embraer S.A. Model ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes; equipped with Goodrich escape slides having P/N 104003-2.

(d) Subject

Air Transport Association (ATA) of America Code 25; Equipment/Furnishings.

(e) Reason

This AD was prompted by reports of failures of the emergency slide on the forward passenger door, which prevented the door from opening. We are issuing this AD to prevent failure of the emergency slide, which can prevent the forward passenger door from opening, and which could result in impeded emergency evacuation and possible subsequent injury to passengers and flightcrew.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Repetitive Re-packing of the Escape Slide

At the applicable compliance times identified in paragraphs (g)(1) and (g)(2) of this AD, re-pack the forward door escape slide in accordance with the Accomplishment Instructions of Goodrich Alert Service Bulletin 4A4030-25A402, dated June 30, 2011 (for Model ERJ 170 airplanes); or Goodrich Alert Service Bulletin 104003-25A403, dated June 30, 2011 (for Model ERJ 190 airplanes). Repeat the re-packing thereafter at intervals not to exceed 18 months.

(1) For escape slides that have not been repacked as of the effective date of this AD: Within 18 months after date of manufacture of the escape slide or within 6 months after the effective date of this AD, whichever occurs later.

(2) For escape slides that have been repacked as of the effective date of this AD: Within 18 months after the last re-pack of the escape slide or within 6 months after the effective date of this AD, whichever occurs later.

(h) Method of Compliance

Accomplishing an overhaul of the escape slide as specified in Task 25-65-01-001, “Emergency Evacuation Slide Assembly,” of the applicable maintenance document identified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD, is acceptable for compliance with any re-pack required by paragraph (g) of this AD.

(1) For Model ERJ 170 airplanes: EMBRAER 170/175 Maintenance Review Board Report, MRB-1621, Revision 8, dated August 20, 2012; or Section 1, “System and Powerplant Maintenance Requirements,” of EMBRAER 170 Maintenance Review Board Report, MRB-1621, Revision 7, dated November 11, 2010.

(2) For Model ERJ 190-100 ECJ airplanes: EMBRAER Lineage 1000 Maintenance Planning Guide, MPG-2928, Revision 3, dated September 28, 2012.

(3) For Model ERJ 190-100 STD, -100 LR, and -100 IGW airplanes; and Model ERJ 190-200 STD, -200 LR, and -200 IGW airplanes: EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 6, dated August 20, 2012; or Section 1, “System and Powerplant Maintenance Requirements,” of EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Cindy Ashforth, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-2768; fax (425) 227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(j) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) Brazilian Airworthiness Directives 2011-12-01 and 2011-12-02, both effective December 27, 2011, for related information. The MCAI can be found in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2012-1108-0002>.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Goodrich Alert Service Bulletin 104003-25A403, dated June 30, 2011.

(ii) Goodrich Alert Service Bulletin 4A4030-25A402, dated June 30, 2011.

(iii) Task 25-65-01-001, “Emergency Evacuation Slide Assembly,” of Section 1, “System and Powerplant Maintenance Requirements,” of EMBRAER 170 Maintenance Review Board Report, MRB-1621, Revision 7, dated November 11, 2010.

(iv) Task 25-65-01-001, “Emergency Evacuation Slide Assembly,” of EMBRAER 170/175 Maintenance Review Board Report, MRB-1621, Revision 8, dated August 20, 2012.

(v) Task 25-65-01-001, “Emergency Evacuation Slide Assembly,” of Section 1, “System and Powerplant Maintenance Requirements,” of EMBRAER 190 Maintenance Review Board Report, MRB-1928, Revision 5, dated November 11, 2010.

(vi) Task 25-65-01-001, “Emergency Evacuation Slide Assembly,” of EMBRAER 190/195 Maintenance Review Board Report, MRB-1928, Revision 6, dated August 20, 2012.

(vii) Task 25-65-01-001, “Emergency Evacuation Slide Assembly,” of EMBRAER Lineage 1000 Maintenance Planning Guide, MPG-2928, Revision 3, dated September 28, 2012.

(3) For Embraer service information identified in this AD, contact Embraer S.A., Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email distrib@embraer.com.br; Internet <http://www.flyembraer.com>.

(4) For Goodrich service information identified in this AD, contact Goodrich Corporation, Aircraft Interior Products, ATTN: Technical Publications, 3414 South Fifth Street, Phoenix, Arizona 85040; telephone 602-243-2270; email george.yribarren@goodrich.com; Internet <http://www.goodrich.com/TechPubs>.

(5) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(6) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

<http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on December 4, 2013.

John P. Piccola,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

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